We claim:

1. A method of eliciting an immune response against a hepatitis C virus (HCV) E2 or E1E2 antigen comprising the step of (a) administering to a subject a polynucleotide encoding the E2 or E1E2 antigen, wherein the E2 and E1E2 antigen is not secreted and wherein E2 is full-length.

2. The method of claim 1, wherein the immune response is a humoral immune response.

3. The method of claim 2, wherein the humoral immune response generates at least one neutralization of binding (NOB) antibody.

4. The method of claim 1, wherein the polynucleotide encodes an E1E2 polypeptide.

5. The method of claim 1, wherein the polynucleotide encodes a full-length E2 polypeptide.

6. The method of claim 1, wherein the HCV antigen does not comprise a p7 polypeptide.

7. The method of claim 1, wherein the HCV antigen is selected from the group consisting of amino acids 384-746 of an HCV polyprotein; amino acids 384-749 of an HCV polyprotein; amino acids 192-746 of an HCV polyprotein, amino acids 192-809 of an HCV polyprotein; amino acids 192-749 of an HCV polyprotein; and amino acids 384-809 of an HCV polyprotein.

8. The method of claim 1, wherein the polynucleotide is in a plasmid.

9. The method of claim 1, wherein the subject is infected with an HCV.

10. The method of claim 1, wherein the subject is not infected with an HCV.

11. The method of claim 1, further comprising the step of administering cardiotoxin to the subject.

12. The method of claim 1, wherein the polynucleotide is administered using a microparticle.

13. The method of claim 12, wherein the microparticle is a PLG microparticle.

14. The method of claim 1, wherein the subject is a mammal.

15. The method of claim 14, wherein the mammal is selected from the group consisting of a mouse, a rabbit, a guinea pig, a macaque, a baboon, a chimpanzee, and a human.

16. The method of claim 1, wherein the polynucleotide is administered using a biolistic delivery device.

17. The method of claim 1, wherein the polynucleotide is administered by a method selected from the group consisting of intramuscular, subcutaneous, intraperitoneal, intranasal, oral, and intradermal administration.

18. The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of an E2 polypeptide to its cognate receptor by an amount which is greater relative to binding of the E2 polypeptide to its cognate receptor in the absence of the neutralizing of binding antibody.

19. The method of claim 3, further comprising the step of detecting the neutralizing of binding antibody.

20. The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:70.

21. The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:140.

22. The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:300.

23. The method of claim 3 wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:600.

24. The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:800.

25. The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:3,000.

26. The method of claim 1, further comprising repeating step (a).

27. The method of claim 1, further comprising administering to the subject a polypeptide encoded by the polynucleotide.